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# Sow Productivity National Swine Survey

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Swine producers with a herd average of 10.8 piglets born per litter and 9.9 born alive are scoring within the average of fellow producers. That's according to a recent National Animal Health Monitoring System (NAHMS) study involving 21,712 litters.

The .9 piglet difference can be attributed to stillbirths, 6.8 percent, and mummies, 1.3 percent.

"Nearly two-thirds of the litters studied had at least one death," pointed out Dr. Joe Connor, chairman of the NAHMS committee for the American Association of Swine Practitioners.

The NAHMS survey, which studied sows by parity (number of times sow has farrowed), discovered that stillbirths increased steadily by .1 from the second through sixth parity (Figure 1). Sows farrowing for the first time or second time averaged .6 stillborn piglets per litter while sows in sixth parity averaged a high of 1.0 stillborn piglet.

Percentage-wise, the number of stillbirths increased sharply after the third litter and again after the fifth litter: from 6.2 percent to 7.4 percent and from 7.8 percent to 9.1 percent respectively.

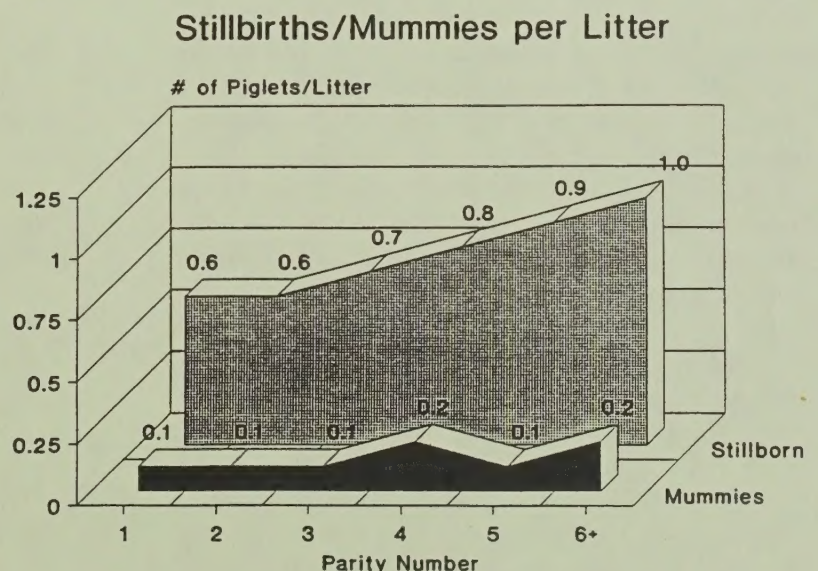
The number of farrowings, however, did not seem to play a role in the

incidences of mummies. Percentage of mummies per litter ranged from a low of 1.2 percent for Parity 2 and 5 to a high of 1.7 percent for Parity 6 and above.

According to the survey, the average swine producer can expect the number of piglets born and the number born alive per litter to increase through the fifth parity. This increase may continue through the sixth parity, but data were combined for parities six and above.

The survey shows that first-time mothers average 9.9 piglets, with 9.2 born alive. By second parity, sows average 10.4 piglets, 9.7 alive; third parity, 11.2 born, 10.4 alive; fourth parity, 11.3 born, 10.4 alive; and fifth parity, 11.7 born, 10.7 alive. By the time a sow farrows

Figure 1.





more than five times, the number born drops to 11.4, with 10.2 alive (see Figure 2).

"At first glance, the numbers might not seem significantly different," Connor interjects. "But when you pencil it out, averaging 10.7 piglets per litter versus 9.2, and talking dollars and cents, it all adds up.

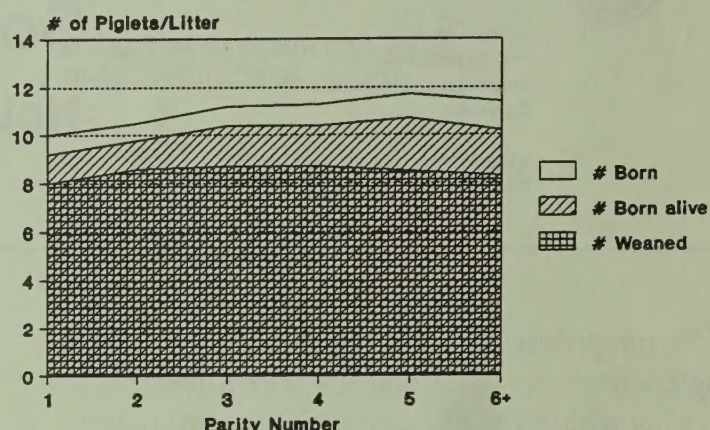
"In gross dollars, we're talking \$150 per sow per farrowing. In weaned pigs, at a \$25 price, this difference will pencil out to \$37.50. Now take that times say 50 sows and you're talking quite a few dollars."

Although the number of piglets born per litter increases through the fifth parity, the number born alive does not increase at the same rate. (See Figure 2.) The percentage of piglets born alive declines slightly after the second parity, and the percentage weaned also falls after the second litter.

No, not all piglets born alive make it to weaning. NAHMS statistics show that 15

**Figure 2.**

### Number of Piglets per Litter by Parity



percent will die before weaning. Second-litter females scored the lowest percentage of preweaning deaths, 13.7, while fifth-litter females had the highest, 17 percent. Preweaning mortality by parity: 14.7 percent, first parity; 13.7 percent, second parity; 15.5 percent, third parity; 15.4 percent, fourth parity; 17.0 percent, fifth parity; and 15.2 percent after the fifth parity.

The National Swine Survey was a cooperative effort of State agricultural departments; universities; and the following USDA agencies: Extension Service (ES), National Agricultural Statistics Service (NASS), and Animal and Plant Health Inspection Service (APHIS). The study of swine health and productivity was conducted from December 1989 through January 1991. The objectives were to provide information on the production and health levels of the United States' swine herd, and to suggest factors that may affect preweaning morbidity and mortality.

A statistical sample of producers from 18 States was selected to provide inferences about the nation's hog population. The resulting estimates represent 95 percent of the United States' swine population.

The National Agricultural Statistics Service (NASS) selected the sample and collected retrospective data on

swine health and management practices from 1,661 farms.

Seven hundred and twelve (712) producers agreed to continue providing data to State and federal Veterinary Medical Officers (VMO's). Each farm was visited a total of four times over a 90- to 120-day period. Data collection instruments such as diary cards were implemented to collect prospective data on the farrowing to weaning stage of swine production. The producers recorded observations of clinical signs associated with illness and death in sows, gilts, and preweaning piglets.

### National Animal Health Monitoring System

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